

**New North American bees of the genera HALICTUS
and PROSOPIS.**

BY CHARLES ROBERTSON.

The following descriptions are of species of bees which I have taken on flowers in Illinois, and for which I need names. Through the kindness of Mr. E. T. Cresson, I have had an opportunity to examine the specimens of *Halictus* contained in the collection of the American Entomological Society, so that the descriptions were made from an examination of specimens from different parts of the country. I have endeavored, as far as I was able, to describe the species so as to be easily distinguished from nearly related species both described and undescribed. The types will be found in the collection of the American Entomological Society.

Halictus Forbesii ♀.—Black, clothed with dull yellowish pubescence; head broader than high, clypeus not produced; antennæ black; mesothorax a little shining, rather coarsely and closely punctured, scutellum sparsely punctured; metathorax not truncate, the semicircular disc bordered by a sharp edge and bearing irregular radiating rugæ, which reach the posterior margin; abdomen finely punctured, segments 2-4 with a broad band of whitish pubescence at base; wings hyaline, nervures dull honey-yellow; tegulæ black, with a testaceous dot; hindmost tibial spur long, with many short, mostly blunt teeth. Length 8-9 mm.

♂.—More shining; face triangular, cheeks short, labrum with a median notch, tips of closed mandibles hardly surpassing the clypeus, anterior half of clypeus pale yellow, disc of metathorax with few radiating lines; wings with the nervures darker than in ♀, the tegulæ sometimes paler; all of the tarsi pale yellowish white. Length 7-9 mm.

Hab.—Illinois; four ♀, two ♂ specimens. Closely resembles *H. coriaceus* Sm. (= *subquadratus* Sm. ♂), but the metathorax is rougher; the ♀ is distinguished by being a little more shining, the clypeus less produced; the ♂ by its more triangular face, shorter mandibles and cheeks, and pale tarsi. Dedicated to Professor S. A. Forbes.

Halictus pectinatus ♀.—Black, clothed with a thin whitish pubescence clypeus produced; antennæ black; mesothorax shining, finely and sparsely punctured; metathorax with a poorly defined truncation, which slopes towards insertion of abdomen; disc small, rounded laterally and toward the truncation, a little rough at base, smooth and shining beyond; abdomen not fasciate, shining and sparsely punctured on first segment, second segment densely punctured,

third and fourth with a little bluish reflection; wings hyaline, nervures fuscous; tegulæ black, with a testaceous spot; hindmost tibial spur long, thickly set with fine teeth. Length 8 mm.

Hab.—Illinois; one specimen.

Halictus nelumbonis ♀.—Black; clypeus slightly produced; mesothorax thinly clothed with blackish pubescence, coarsely and densely punctured, the punctures confluent into coarse reticulations on the sides; scutellum more finely punctured; metathorax hardly truncate, clothed with long, feathery hairs, the surface obscured by a sericeous tomentum, the disc bearing a triangular enclosure, which is rugose and shining, in strong contrast with the hairy portion; abdomen shining, impunctate, segments 2 and 3 with faint indications of interrupted basal fasciæ of pale pubescence; wings hyaline, or a little clouded, nervures fuscous; tegulæ black, punctate; posterior tibial spur with four or five teeth, the basal ones longest. Length 7–8 mm.

♂.—Closely resembles the female; antennæ hardly longer; mandibles, except tips, testaceous; labrum emarginate; abdomen, impunctate tegulæ and legs, inclining to brownish. Length 6–7 mm.

Hab.—District Columbia, Florida, Illinois, Wisconsin (Trelease); thirty-four ♀, two ♂ specimens.

This bee prefers flowers of *Nymphaeaceæ*, which seems to account for its being overlooked. I have taken it on flowers of *Nuphar*, *Nymphaea* and *Nelumbo*, in Illinois, and on *Nuphar* and *Nymphaea* in Florida. Prof. Trelase found it on *Nuphar* in Wisconsin. The American Entomological Society's collection contained only the two males from District of Columbia.

Halictus 4-maculatus ♀.—Black, shining; head broad, eyes prominent, clypeus hardly produced; mesothorax finely and rather sparsely punctured; scutellum sparsely punctured; metathorax rounded, the disc short, sloping, with longitudinal rugæ at base, smooth beyond; abdomen impunctate, bases of segments 2 and 3 with a patch of appressed white pubescence on each extreme side; wings hyaline, nervures fuscous, or dull honey-yellow, second cubital cell strongly narrowing to the marginal, the first recurrent nervure commonly uniting with the second transverse cubital; tegulæ more or less testaceous; posterior tibial spur with four or five long teeth. Length 5–6 mm.

♂.—Resembles the female; form not slender; head large; antennæ little longer than in female; metathorax a little rougher; clypeus anteriorly, labrum, mandibles, except tips, tegulæ, tibiæ, except a patch above and beneath, and tarsi, pale whitish, or testaceous. Length 5 mm.

Hab.—Connecticut (Patton), Tennessee (Aaron), Illinois; fourteen ♀, one ♂ specimen. The female is apt to be confused with that of *H. gracilis*, but may be distinguished by the descriptions.

Halictus gracilis ♀.—Black, opaque; clypeus produced; mesothorax closely and minutely punctured; metathorax hardly truncate; the disc with irregular longitudinal striæ, sometimes uniting in coarse reticulations, at apex

smooth and somewhat elevated; abdomen shining, without patches of appressed white pubescence; wings hyaline, nervures dull testaceous, the second cubital cell not strongly narrowed to marginal; tegulæ testaceous; posterior tibial spur with three or four long teeth. Length 6—7 mm.

♂.—Slender; a little more shining; antennæ long, testaceous beneath; disc of metathorax more elevated at apex; clypeus anteriorly, labrum and mandibles, generally, pale yellow; knees, sometimes, and tarsi honey-yellow; nervures fuscous; tegulæ black, or testaceous. Length 5—6 mm.

Hab.—New Hampshire, Illinois, Nevada, California; twenty ♀, twelve ♂ specimens. Closely resembles *H. 4-maculatus*.

Halictus palustris ♀.—Blue-green, especially the head and thorax, clothed with long, thin, white pubescence; head broad, clypeus not produced; mesothorax strongly, not closely punctured; metathorax short, broad, strongly truncate; truncation smooth; disc rough, with irregular longitudinal rugæ, bounded posteriorly by a salient rim; abdomen shining, finely and sparsely punctured, clothed with whitish pubescence, except on the discs of the first two or three segments; apical margins of segments rather broadly testaceous; wings whitish hyaline, nervures testaceous, often pale; tegulæ brown, punctured; legs brown or fuscous. Length 6—8 mm.

♂.—Resembles the female; antennæ long, more or less testaceous beneath; metathorax rougher, the disc with the salient rim forming a semicircular enclosure; abdomen less greenish; tarsi pale testaceous. Length 6—8 mm.

Hab.—New Hampshire, Massachusetts, Connecticut, New York, Maryland, District of Columbia, Tennessee, Illinois; thirty-nine ♀, twenty ♂ specimens. Easily recognized by its metathorax and punctured tegulæ.

Halictus Cressonii ♀.—Head and thorax green, abdomen black; head broad, clypeus not produced; mesothorax strongly punctured, clothed with thin fulvous pubescence; metathorax blue-green, narrow, strongly truncate; truncation with superior lateral angles salient; disc rough, with coarse reticulations; abdomen shining, almost impunctate, apical margins of segments hardly testaceous, triangular patch on each side of base of second, and whole of remaining segments with close, pale fulvous pubescence; wings yellowish hyaline, tegulæ and nervures honey-yellow, second and third submarginal cells of about equal width. Length 6—7 mm.

♂.—Resembles the female; antennæ black; metathorax less strongly truncate; tegulæ and nervures darker; tarsi honey-yellow. Length 5—6 mm.

Hab.—Canada, Maine, Massachusetts, Connecticut, New York, Illinois, Montana, Washington; twenty-three ♀, two ♂ specimens. Dedicated to Mr. E. T. Cresson.

Halictus albipennis ♀.—Head and thorax greenish, abdomen brownish; clypeus produced; mesothorax coarsely and rather sparsely punctured, clothed with thin white pubescence; metathorax not sharply truncate, disc with longitudinal rugæ, slightly elevated posteriorly; abdomen depressed, shining.

almost impunctate, apical margins of segments narrowly testaceous, the whole with close whitish pubescence, except discs of first and second; wings white, hyaline, nervures very pale; tegulæ honey-yellow. Length 5—6 mm.

♂.—Resembles the female; mandibles at tips, antennæ beneath, knees and tarsi, testaceous. Length 5 mm.

Hab.—Illinois; ten ♀, one ♂ specimen.

Halictus tegularis ♀.—Head and thorax dark green, sometimes with a brassy reflection, abdomen brown; flagellum at tip beneath, testaceous; mesothorax rather strongly and closely punctured; metathorax rounded, not strongly truncate, the disc with irregular rugæ not reaching posterior margin; abdomen shining, thinly clothed with pale pubescence, apical margins of segments more or less testaceous; wings hyaline, nervures honey-yellow; tegulæ large, black, pubescent, strongly punctured. Length 4.5—5.5 mm.

♂.—Resembles the female, abdomen more strongly punctured, antennæ testaceous beneath. Length 4 mm.

Hab.—Connecticut, District of Columbia, Illinois, Montana, California, Mexico; thirty-one ♀, two ♂ specimens. Easily distinguished by its small size and strongly punctured tegulæ.

Prosopis nelumbonis ♀.—Head and thorax closely punctured with coarse shallow punctures; clypeus long, finely roughened, with shallow depressions; base of metathorax rough, with coarse reticulations; abdomen impunctate, smooth and shining, especially the first segment. Insect black, clothed with a thin whitish pubescence; triangular mark on each side of face, tubercles and spot on tegule in front, yellow; abdomen with the first and base of second segment rufous; legs black, base of tibiæ yellow, extending to the middle on posterior pair; hind tarsi fulvous. Length 6.5 mm.

Hab.—Illinois. Four specimens, taken on flowers of *Nymphaea reniformis* and *Nelumbo lutea*.